



PUTTING AMERICA BACK TO WORK

**A Comprehensive, Worker-Focused Response to the
Economic Disruption Caused By
Automation and Globalization**



Tim Ryan
Member of Congress
U.S. House of Representative

INTRODUCTION

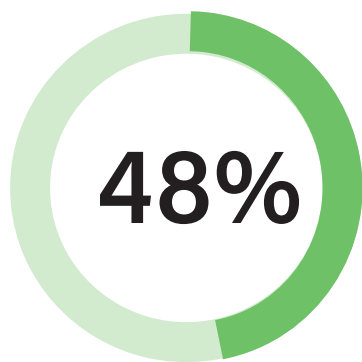
Our country's economy is continually changing. As industries and workers adapt to globalization, automation, technological advancements, and growing wage inequality -- the United States must speed up to keep up.

The rise of automation, robots, and artificial intelligence has the potential to grow the U.S. economy and create new opportunities for our society that few can imagine. However, we cannot ignore the reality that these advancements combined with globalization have already contributed to job loss and economic instability for many American workers, especially those who are low-paid, under-skilled, or less-educated.

What follows is a comprehensive, worker-focused response to the economic disruption caused by automation and globalization. It includes recommendations for research and development, job creation, policy changes, and strategic investments. This report is an economic plan that will put Americans back to work and sustain the United States' role as a leader in the global economy.

PUT AMERICANS BACK TO WORK

A 2018 study commissioned by the Center for American Progress found that 48 percent of voters have serious problems "finding a decent job with good wages."¹ To address this, our government must take direct action to create dependable, living-wage jobs for the workers in search of them. Automation, free trade, and global competition have all contributed to a loss of full-time, working-class jobs. A national commitment to infrastructure investment would not only be good for business, but also for the communities and populations who stand to benefit most from improved connectivity, a stronger manufacturing sector, and opportunities for job creation in emerging industries.



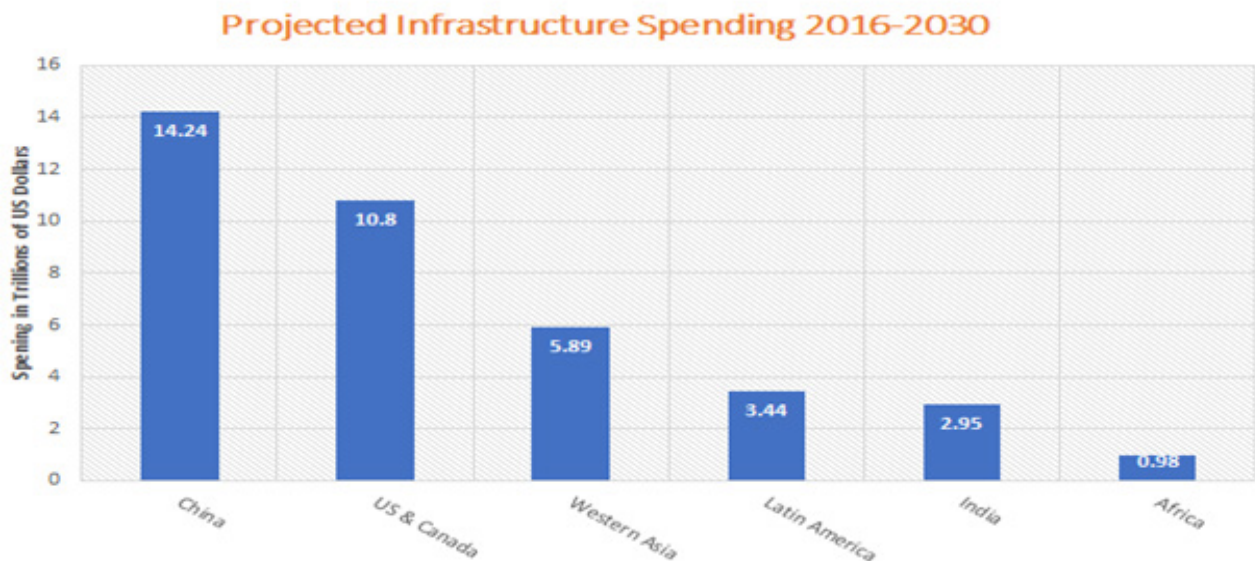
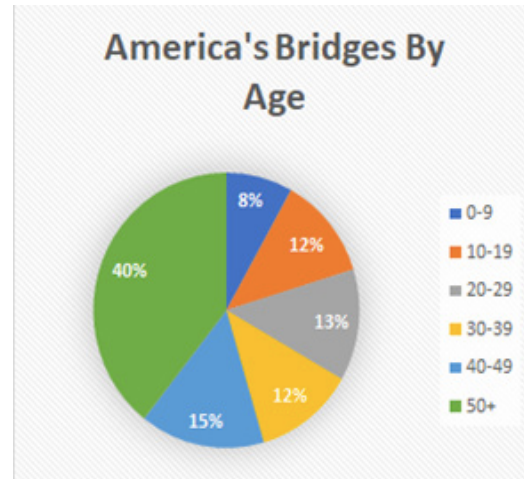
of voters have **serious** problems "finding a decent job with good wages"

¹ Center for American Progress. (2018, May 14). Blueprint for the 21st Century. Retrieved from <https://www.american-progress.org/issues/economy/reports/2018/05/14/450856/blueprint-21st-century/>

Rebuilding Aging Infrastructure

Across the United States, there are thousands of crumbling roads, bridges, railroads, ports, and sewer systems in urgent need of repairs. The recent water crisis in Flint, Michigan, is a well-documented example of this nationwide problem. Aging critical infrastructure has an adverse effect on all communities, but it disproportionately affects distressed communities already struggling to spur economic growth and lower rates of unemployment.

The potential size and scope of much-needed infrastructure projects is astounding. The American Water Works Association (AWWA) estimates there are 6.1 million lead service lines in need of replacement, connected to 7 percent of homes. A U.S. Department of Transportation (USDOT) report concluded that 64 percent of federal-aid highway miles have pavement in fair or poor condition. Moreover, 9 percent of our nation's bridges—54,560 of them—are deemed "structurally deficient." According to the Environmental Protection Agency (EPA), the cost of making capital improvements to our water system alone would be \$384 billion over 20 years.^[7]



Our low prioritization of infrastructure investment has real economic consequences. The federal government's piecemeal approach to funding our transportation infrastructure has cost Americans over 900,000 jobs, including more than 97,000 in manufacturing.² For every \$1 billion invested in transportation infrastructure, over 21,000 jobs are created.³



We need a trillion-dollar infrastructure package to rebuild our roads, bridges, railways, and highways. But we need to think bolder. We need to remove blight in our neighborhoods, create more urban gardens, and make our cities more walkable. We need an infrastructure plan that not only puts people to work right away, but also moves our country into the future. I have seen firsthand the transformational impact targeted federal investment can have on communities in need of it.



Kent Central Gateway Project

The Portage Area Regional Transportation Authority (PARTA)—in collaboration with the City of Kent and Kent State University—was awarded \$20 million to erect the Kent Central Gateway Multimodal Transit Facility in downtown Kent. The \$20 million in TIGER funding leveraged a \$105 million facelift to the City of Kent, resulting in 969 construction jobs, over 700 permanent jobs, and an increase in local tax revenues. This public-private partnership has had a major impact on the City of Kent, Portage County, and the Northeast Ohio region.



Downtown Akron Promenade

The City of Akron received \$13 million for enhancements to the downtown area and to support the local and global businesses located there. These funds will help advance numerous transportation improvements on the horizon, including the Cedar-Exchange Complete Street project, the Oak Park Project to reconfigure Dart and Rand Avenues, South Main Street in the Downtown Akron Innovation District, and the Akron BioMedical Corridor—a 506-acre area connecting The University of Akron, Akron Children's Hospital, Akron General Medical Center, Summa Health Systems, and the Austen BioInnovation Institute. Akron is quickly becoming a global hub of innovation, attracting international biomedical companies and technologies looking to commercialize their products and reach a global market.



² Brun L., Jolley G., Hull A., and Frederick S. (2014, October) Infrastructure Investment Creates American Jobs. Retrieved from http://aamweb.s3.amazonaws.com/AAM_InfrastructureReport_Oct2014.pdf

³ Ibid.

Deploying High-Speed, High Capacity Broadband

Over the past two decades, the internet has become an integral part of everyday life. Expanding the capacity of our broadband network and increasing connection speeds can create economic opportunity in both the short and long term. In the short term, we need to incentivize the deployment of broadband in underserved geographic areas. This would expand broadband connectivity to the 10 percent of Americans who still lack access. The Brookings Institute projects “capital investment in broadband over the next five years would create approximately 509,000 jobs relative to a world without such investment.”⁴

10% of Americans lack broadband access 

In the long term, broadband deployment increases economic activity in several ways. It makes it easier for universities, municipalities, and healthcare providers to be innovative in their work. It helps businesses apply for government contracts and young entrepreneurs grow their small businesses and startups. It also helps schools and public libraries connect to the resources that allow students to acquire the skills and job seekers to acquire the training to be competitive in an increasingly globalized and advanced economy.

Expanding Clean Energy Jobs

Since the 1990s, clean energy has overtaken a growing share of the United States’ overall energy production and consumption. The industry has employed over 599,775 workers in 12 Midwestern states alone.⁵ Between 2015 and 2016, the Midwest region added 30,795 jobs, growth of more than 5 percent.⁶ In Ohio, the industry is growing at an annual rate of 4.6 percent and employs 105,443 workers.⁷ Investing in clean energy will continue industry expansion and create employment opportunities for hard-working Americans. Renewable energy generation, clean transmission, energy efficiency, clean fuels, and advanced transportation are just a few of the jobs that we can expect to see in the coming years.

Given the industry’s growth potential, we need to start investing in the next generation of clean energy technologies. Clean energy investment will not only increase conservation

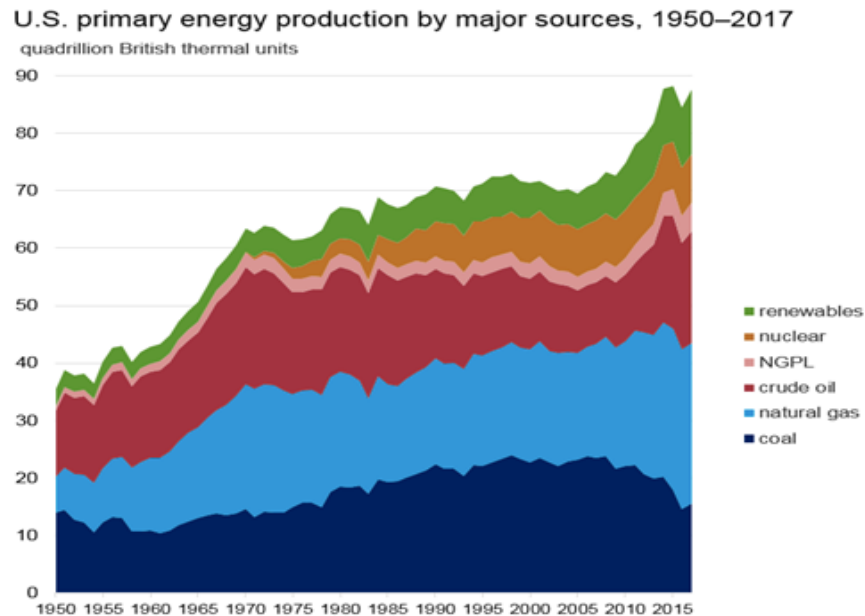
⁴ Crandall, R. W., & Singer, H. J. (2016, July 28). Broadband Creates Jobs. Retrieved from <https://www.brookings.edu/opinions/broadband-creates-jobs/>

⁵ Clean Jobs Midwest. (2017). Midwest Executive Summary (Rep.). doi:<https://www.cleanjobsmidwest.com/wp-content/uploads/2017/09/CJM-2017-ExeSum-Midwest.pdf>

⁶ Ibid.

⁷ Clean Jobs Midwest. (2017). Ohio Toplines. Retrieved from <https://www.cleanjobsmidwest.com/state/ohio>

efforts, but also create thousands of jobs for workers in the building trades. In 2009, there were 5,700 turbines installed in the United States.⁸ The turbines required 17,000 blades and tower sections, approximately 3.2 million bolts, 36,000 miles of rebar, and 1.7 million cubic yards of concrete.⁹ The capital needs of the clean energy industry will create job opportunities across a wide range of manufacturing and advanced technology industries.



Strengthening Our Manufacturing Sector

Manufacturing is a critical part of our economy. In Ohio, the industry employs over 600,000 people¹⁰ and makes up 17 percent of the state's gross domestic product.¹¹ Northeast Ohio



⁸ Platzer, M. (2012). U.S. wind turbine manufacturing: Federal support for an emerging industry (Publication). doi:<https://hub.globalccsinstitute.com/publications/us-wind-turbine-manufacturing-federal-support-emerging-industry>

⁹ Ibid.

¹⁰ The Ohio Manufacturers' Association. (2012). Ohio Manufacturing Counts (Rep.). doi:http://www.themanufacturinginstitute.org/~media/C4E028A38BE24F5E902CF696F9956C4C/Ohio_Manufacturing_Counts.pdf

¹¹ Ohio Development Services Agency. (2018). Economic Overview (Rep.). doi:<https://development.ohio.gov/files/research/E1000.pdf>

has more than 400 manufacturing companies employing nearly 76,000 workers.¹² If we fail to properly support our manufacturing sector, the results will be devastating. Between 2000 and 2010 the U.S. lost more than five million manufacturing jobs equal to one-third of manufacturing employment in this country.¹³ Once domestic manufacturing disappears, so will engineering and other high-paying economic sectors. We cannot afford to cede our dominance in these markets to other countries.

Chief Manufacturing Officer Act

I introduced the **Chief Manufacturing Act** to establish an office at the White House, headed by a U.S. Chief Manufacturing Officer, to develop a national manufacturing strategy and troubleshoot manufacturing-related issues. The Chief Manufacturing Officer would advocate on behalf of our manufacturing workforce to ensure we do not hurt these workers through the unintended consequences of some policies.

The future of American manufacturing rests in the industry's ability to innovate. When our manufacturers are given the tools they need to compete globally, Americans prosper and our economy grows stronger. Investing in the modernization of our manufacturing sector is an investment in the nation as a whole.

We must also forge better trade agreements to protect our manufacturing sector and our workforce. In 2013, we maintain a \$177 billion trade deficit with our NAFTA partners and have lost one million jobs under the agreement.¹⁴ On average, these good-paying jobs paid 9 percent more per week than those in other economic sectors.¹⁵

¹² Pledger, M. (2018, February 14). Northeast Ohio manufacturing survey shows product, service innovations lead to growth (photos). Retrieved from https://www.cleveland.com/business/index.ssf/2018/02/northeast_ohio_manufacturing_s.html

¹³ Atkins, P., Blumenthal, P., Edisis, A., Friedhoff, A., Curran, L., Lowry, L., . . . Wolman, H. (2011). Responding to Manufacturing Job Loss: What Can Economic Development Policy Do? (Rep.). doi:https://www.brookings.edu/wp-content/uploads/2016/06/06_manufacturing_job_loss.pdf

¹⁴ U.S. International Trade Commission, "Interactive Tariff and Trade Dataweb," accessed February 9, 2014. Available at: <http://dataweb.usitc.gov>.

¹⁵ Stettner, A., Yudken, J., & McCormack, M. (2017, June 13). Why Manufacturing Jobs Are Worth Saving. Retrieved from <https://tcf.org/content/report/manufacturing-jobs-worth-saving/>



All that American workers ask for is a level playing field on which to compete globally. As our country negotiates and renegotiates trade deals, it is essential that these deals include fully enforceable labor and environmental standards. They should not include provisions that encourage companies to offshore jobs and undermine Buy America and Buy American procurement preferences. Instead, our trade deals must include strong rules of origin on cars, auto parts, and other manufactured goods, as well as strict, enforceable mechanisms to fight currency manipulation by foreign governments.



America Makes

In 2012, a landmark \$85-million public-private investment was made in Northeast Ohio to help revitalize American manufacturing. That joint venture, America Makes, was the first major investment in additive manufacturing, the process of printing objects from 3D model data, typically layer by layer. Today, America Makes is a leader in additive manufacturing and 3D printing technology, research, and development.



GIVE CHILDREN THE SKILLS THEY NEED TO SUCCEED

It is imperative that we equip our children with the skills they need to succeed in the 21st Century. Education is key to ensuring they are well-positioned to compete for jobs in an increasingly modern and global economy. If we fail to educate our youth and proactively address the realities of the coming age, we will fail to preserve the American Dream for future generations.

Increase STEM Education

Our education system is falling behind the rest of the world. According to the Organization for Economic Cooperation and Development (OECD), the United States ranks 29th in math and 22nd in science among 35 industrialized nations.¹⁶ After nearly two decades of growth, the math proficiency of American fourth graders and eighth graders is on the decline.¹⁷ Only 16 percent of high school seniors are math proficient and interested in science, technology, engineering, and mathematics (STEM).¹⁸ Among those who pursue a college major in a STEM field, only half will go on to work in a related career.¹⁹



¹⁶ U.S. Department of Education. <https://www.ed.gov/stem>

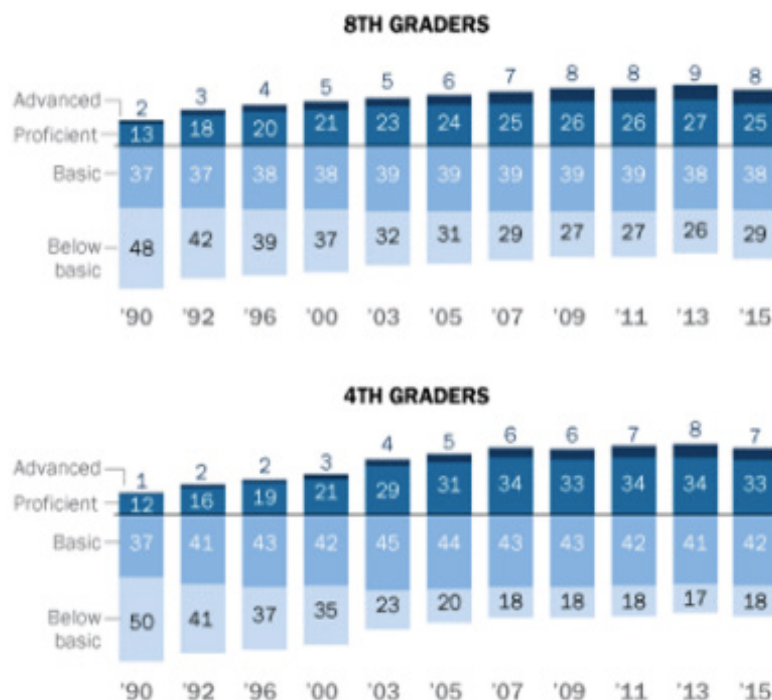
¹⁷ Funk, C., & Rainie, L. (2015, January 29). Public and Scientists' Views on Science and Society. Retrieved from <http://www.pewinternet.org/2015/01/29/public-and-scientists-views-on-science-and-society/>

¹⁸ U.S. Department of Education. <https://www.ed.gov/stem>

¹⁹ Funk, C., & Rainie, L. (2015, January 29). Public and Scientists' Views on Science and Society. Retrieved from <http://www.pewinternet.org/2015/01/29/public-and-scientists-views-on-science-and-society/> Ibid.

After years of growth, math proficiency of U.S. students dips

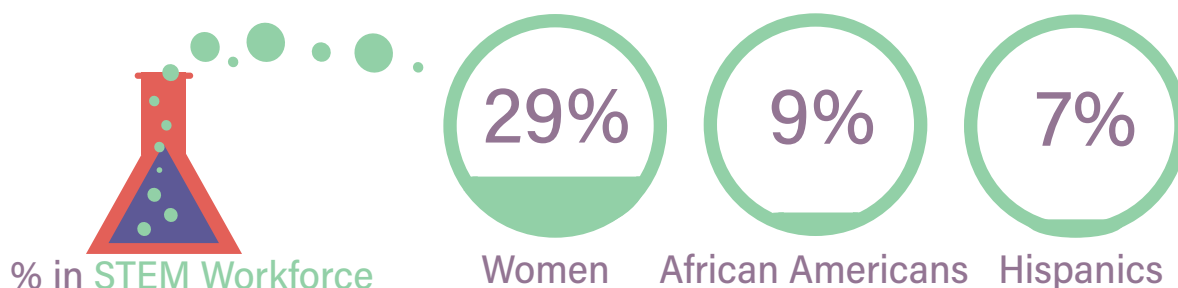
% at each achievement level of the National Assessment of Educational Progress (NAEP)



Source: NAEP Data Explorer, National Center for Education Statistics

PEW RESEARCH CENTER

Even more troubling is the lack of gender and racial representation in STEM fields. Women make up half of the U.S. college-educated workforce, but just 29 percent of the science and engineering workforce.²⁰ Most racial minorities are underrepresented in STEM. African Americans and Hispanics comprise 9 percent and 7 percent of the STEM workforce, respectively, compared to 11 percent and 16 percent of the U.S. workforce.²¹ While Asians are overrepresented in STEM relative to their share of the U.S. workforce, 82 percent of them are foreign-born.²²



²⁰ National Science Board 2017 Science and Engineering Indicators Report

²¹ Ibid.

²² <http://www.pewsocialtrends.org/2018/01/09/women-and-men-in-stem-often-at-odds-over-workplace-equity/>

Promote and Expand Skills-based Education

These education issues are further exacerbated by an economy that increasingly demands skilled, highly-educated workers. In Ohio, most jobs will require a postsecondary credential by 2020.²³ For employers in the Midwest, finding skilled workers is particularly challenging. Eighty percent of employers surveyed reported difficulty hiring over the past year. Almost a third found hiring “very difficult,” citing applicants’ lack of experience, technical training, and skills; insufficient qualifications; and inadequate soft skills.²⁴ When Siemens Energy opened a gas turbine production plant in Charlotte, North Carolina, over 10,000 people showed up to a job fair looking to fill 800 positions. Among the applicants, fewer than 15 percent passed a reading, writing, and math screening test geared toward a ninth-grade education.²⁵

To the extent that education is correlated with skills, we can expect a significant decline in demand for low-skilled workers and little to no decline in demand for highly-skilled workers. A 2012 study by OECD estimated that 44 percent of workers with less than a high school diploma hold jobs involving highly-automated tasks. By contrast, just one percent of workers with a bachelor’s degree or higher hold such a job.²⁶ These estimates suggest a continuation of skill-biased technical change in the near term, one that will likely result in less-educated workers being replaced by automation at higher rates than more educated ones.²⁷

To help prepare our children for the future, our country must promote skills-based education and remove the stigma behind vocational education. Career and technical education, community colleges and post-secondary licenses or certificates-credentials can provide a pathway to many careers in the future including healthcare, construction, manufacturing, and jobs in the natural resources industry. We must pass the **Debt-Free College Partnerships Act**, the **College For All Act**, and the **Aim Higher Act** which allow every individual in this country to get a debt-free, quality education at either a community college, four-year college, or university.

44 percent of workers with
less than a high school diploma hold jobs
involving highly-automated tasks

²³ Workforce Trends and Reports | Aligning Opportunities in Northeast Ohio. (2018, May). Retrieved from <https://www.clevelandplus.com/teamneo/portal/industry-insights-materials/workforce-trends-reports>

²⁴ Clean Jobs Midwest. 2016. Retrieved from <https://www.cleanjobsmidwest.com/midwest>

²⁵ Selingo, J. J. (2017, January 30). Wanted: Factory Workers, Degree Required. Retrieved from https://www.nytimes.com/2017/01/30/education/edlife/factory-workers-college-degree-apprenticeships.html?_r=1

²⁶ OECD, “Program for International Student Assessment 2012 Results (<https://www.oecd.org/unitedstates/PISA-2012-results-US.pdf>).

²⁷ Ibid.

Worker Act

My legislation, the **WORKER Act**, would ensure American children have the skills they need to succeed in the 21st Century. It would create grant programs to fund engineering and engineering technology education programs. It would expand maker education and makerspaces in schools. And it would prioritize and support programs that increase participation among women and underrepresented racial minorities in STEM occupations.

PROTECT AMERICAN WORKERS FOR FUTURE EMPLOYERS

The shift towards the use of automation away from human labor is inevitable and comes with troublesome consequences for American workers. If the projections are accurate, automation will lead to millions of Americans having their livelihoods significantly altered and facing considerable economic challenges in the short- and medium-term.²⁸ To avoid these hardships, the United States must be forward-thinking in its creation of retraining, income support, and wage insurance programs specifically designed to help men and women who have lost their jobs due to this technological innovation.

The Age of Automation

Since 2000, nine out of every 10 American jobs lost has been due to increases in productivity and automation, not workers in other countries. Artificial Intelligence (AI), coupled with advanced computing, has driven the decades-long march toward an information-driven economy.²⁹ While the offshoring of labor plays a role in the loss of middle-class jobs, the vast majority of domestic job losses can be attributed to technological innovations. For example, autonomous vehicle technology is poised to threaten between 2.2 million and 3.1 million U.S. automotive jobs in the near future. This elimination would affect 1.7 million truck drivers alone.³⁰

²⁸ United States, Executive Office of the President. (2016). Artificial intelligence, Automation, and the Economy.

²⁹ Hicks, M. J., & Devaraj, S. (2017, April). The Myth and the Reality of Manufacturing in America [Scholarly project]. Retrieved from <https://conexus.cberdata.org/files/MfgReality.pdf>

³⁰ United States, Executive Office of the President. (2016). Artificial intelligence, Automation, and the Economy.

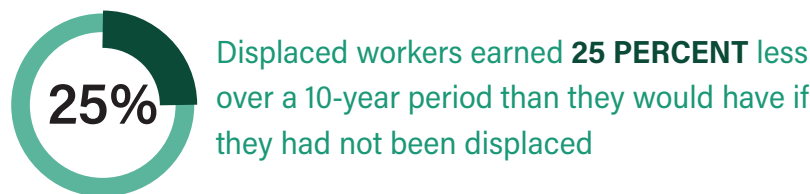
Work Activity Category	Automation Potential
Managing and developing people	9%
Applying expertise to decision making, planning, and creative tasks	18%
Interfacing with stakeholders	20%
Performing physical activities and operating machinery in unpredictable environments	26%
Collecting data	64%
Processing data	69%
Performing physical activities and operating machinery in predictable environments	80%

This threat is not isolated to U.S. manufacturing. In fact, automation has the potential to upend job markets across a wide array of sectors. Technology is on track to automate 45 percent of the activities workers are currently paid to perform, and about 60 percent of all occupations could see 30 percent or more of their activities automated.³¹ Given the speed and scale of the change on the horizon, it is appropriate to raise concerns about our ability to keep pace with the mass displacement of American workers. Preparation for this shift towards computerized labor is needed to keep Americans working during and after the transition.

Wage Disparities for Displaced Workers

Even if workers are lucky enough to find new jobs, depressed wages have become the new norm. In recent decades, American workers displaced from their jobs—due to a plant closure or a company moving overseas, for example—have experienced substantial declines in earnings.³²

The Hamilton Project found that displaced workers earned 25 percent less over a 10-year period than they would have if they had not been displaced. Workers displaced³³ from the



³¹ Chui, M., Manyika, J., & Miremadi, M. (2015, November). Four fundamentals of workplace automation. Retrieved from <https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/four-fundamentals-of-workplace-automation>

³² Steven J. Davis and Till Von Wachter (2011), "Recessions and the Costs of Job Loss," Brookings Papers on Economic Activity, Economic Studies Program, The Brookings Institution, 43(2): 1-72, 2011 (<http://www.econ.ucla.edu/workshops/papers/Monetary/Recessions%20and%20the%20Costs%20of%20Job%20Loss%20with%20Appendix.pdf>).

³³ LaLonde, R., & Sullivan, D. (2010). Retraining Displaced Workers (Issue brief). doi:http://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/10_displaced_workers_lalonde.pdf

manufacturing sector experienced particularly large losses.³⁴ When they found work in another sector, they earned about 40 percent less.³⁵ Even workers who found new jobs in the same industry experienced long-term earnings losses in excess of 15 percent.³⁶ After ten years, their earnings remained depressed by 10 percent or more.³⁷

These wage disparities hit older displaced workers particularly hard. During the Great Recession, median hourly wages for men age 50 to 61 were 20 percent below their past earnings.³⁸ For men age 62 and older, the disparity was a staggering 36 percent.³⁹ Younger men fared much better.⁴⁰ Median hourly wages for men age 35 to 49 were just 4 percent below their past earnings and just 2 percent for men age 25 to 34.⁴¹ While the economy has recovered, many workers are left unable to sustain a middle-class lifestyle.⁴² We need a wage insurance program that will help displaced workers transition into new employment and give them a more secure economic future.

Worker Act

The **WORKER Act**, would help smooth the transition into new employment for older, displaced workers. Eligible workers age 50 and older who obtain full-time employment and earn less than \$50,000 a year would be eligible to receive wage insurance for up to two years to partially offset the wage disparity between their previous and current job. In economically distressed communities, workers age 45 and older would be eligible.



³⁴ LaLonde, R., & Sullivan, D. (2010).

³⁵ Ibid.

³⁶ Jacobson, L., LaLonde, R., & Sullivan, D. (2011). Policies to Reduce High-Tenured Displaced Workers' Earnings Losses Through Retraining (Working paper No. 2011-11).

³⁷ Davis and Von Wachter (2011).

³⁸ Van Horn, C., Krepcio, K., & Heidkamp, M. (2015). Improving Education and Training for Older Workers (Rep.).

³⁹ Ibid.

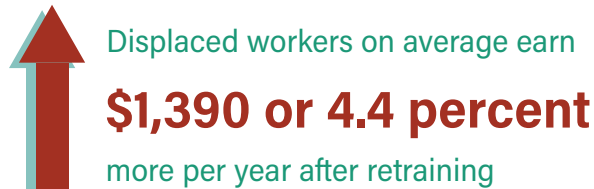
⁴⁰ Ibid.

⁴¹ Ibid.

⁴² Allen, M. (n.d.). Axios AM. Retrieved from <https://www.axios.com/newsletters/axios-am-82f22e8d-d1ac-49a9-8749-7914c260ae93.html>

The Need for Retraining

While U.S. manufacturing output has steadily increased, jobs in this industry are declining due to automation.⁴³ To avoid a collapse in economic growth, displaced workers need to be retrained for the jobs that remain. Job retention is beneficial not only to the industry, but also to its workers. Displaced workers on average earn \$1,390 (or 4.4 percent) more per year after retraining.⁴⁴



Retraining programs can be particularly beneficial to older displaced workers, many of whom once worked in the construction and manufacturing sectors. Older workers may need additional education courses before they can retrain for jobs in knowledge-based, high-tech sectors. A Heldrich Center Work Trends survey of the unemployed, including older workers, found that 69 percent of respondents recognized the need to prepare for new careers by updating their skills.⁴⁵ However, only 19 percent enrolled in a training program while unemployed. Access to retraining continues to be a struggle for the older Americans who tend to have the greatest need for it. According to the U.S. Census Bureau, in 2015, 32 percent of adults age 45 to 64 had a bachelor's degree, compared with 36 percent of adults between ages 25 and 34 as well as 35 to 44.⁴⁶

Still, the U.S. Department of Labor's Taskforce on the Aging of the American Workforce found the extent of employer-provided training declines with the age of the employee.⁴⁷ Workers between the ages of 25 and 34 received an average of 37 training hours per year, compared with nine hours per year for workers age 55 and older.⁴⁸ A 2013 national survey of older workers further illustrated this issue, finding that nine percent of workers over 50 believed they had been denied access to training or the chance to acquire new skills because of their age.⁴⁹

⁴³ Gravelle, J. (2016, December 23). U.S. Economy in a Global Context. Retrieved from <http://www.crs.gov/Reports/IF10569?source=search&guid=305131ca448448eea78faf5716b98930&index=0>

⁴⁴ Jacobson, L., LaLonde, R., & Sullivan, D. (2011).

⁴⁵ Dixon, K., & Van Horn, C. (2003). *The Disposable Worker: Living in a Job-Loss Economy* (Publication). doi:http://heldrich.rutgers.edu/sites/default/files/products/uploads/Disposable_Worker.pdf

⁴⁶ Ryan, C., & Bauman, K. (2016). *Educational Attainment in the United States: 2015* (United States, Census Bureau)

⁴⁷ United States, Department of Labor, Employment & Training Administration. (2008). *Report of the Taskforce on the Aging of the American Workforce*.

⁴⁸ Farrell, C. (2017, October 18). Employers Need To Train Their Older Workers, Too. Retrieved from <https://www.forbes.com/sites/nextavenue/2017/10/17/employers-need-to-train-their-older-workers-too/#784a12086853>

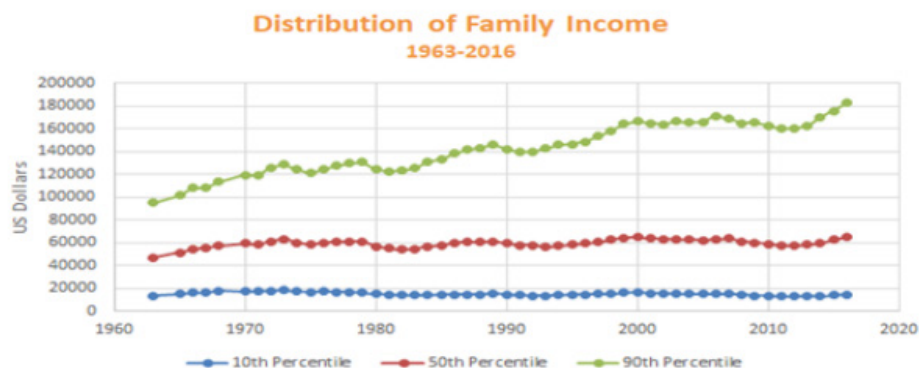
⁴⁹ Van Horn, C., Krepcio, K., & Heidkamp, M. (2015).

Worker Act

No American worker should worry about how she or he will afford a job training program. The **WORKER Act** would allow each worker to receive a training voucher valued up to \$8,000 for two years for their participation in short-term training programs teaching in-demand skills.

IMPROVE INCOME SUPPORT SERVICES FOR WORKING FAMILIES

Over the last 40 years, there has been a monumental shift in how wealth is distributed in the United States. In the decades after World War II, the share of income earned by the bottom 90 percent of workers remains mostly unchanged.



While other developed nations have experienced similar technological changes over this time period, the United States stands alone in experiencing an unprecedented increase in both income inequality and overall levels of inequality. There are steps we can take to change that.

Labor Unions

Labor unions built this country. Following the World War II industrial boom, they fought to secure livable wages for working-class Americans and helped close the wage gap for women and workers of color. Their efforts gave us cleaner and safer workplaces, the 40-hour workweek, and the largest middle class the world had ever seen. Organized labor restored the link between hard work and opportunity by allowing the benefits of economic growth to be more broadly shared.

As labor unions come increasingly under attack, so do American workers. According to the Economic Policy Institute, “union erosion can explain about one-third of the growth of wage inequality among men and about one-fifth of the growth of wage inequality among women from 1972 to 2007. For middle-wage men, the impact of the erosion of unions on the wages of both union and non-union workers is likely the largest single factor underlying wage stagnation and wage inequality.”⁵⁰



As a nation, we should be strengthening unions, not undercutting them. States must continue to reject Right-to-Work laws to ensure all workers can fight for a greater portion of bloated corporate profits.

Workplace Democracy Act

The **Workplace Democracy Act** would allow workers to form unions simply by collecting signatures in favor of unionization from a majority of their colleagues. This legislation includes additional reforms to help protect and strengthen union membership.

⁵⁰ Economic Policy Institute, “Union Decline Lowers Wages of Nonunion Workers.”

Worker Act

Many individuals struggle to find employment and participate in training programs due to everyday challenges like securing child care services or a lack of reliable transportation. I introduced the **WORKER Act**, in part, to address this common problem. Unemployed workers would receive a stipend for income support services equal to 50 percent or 100 percent of their unemployment insurance weekly benefit amount, depending on their household income.

Living Wage

In 2013, more than 3 million Americans worked at an hourly rate at or below the federal minimum wage of \$7.25.⁵¹ No one can live on \$7.25. Every worker in this country should make at least \$15 an hour. This is not only an economic issue, but also a social justice issue.

And we cannot stop there. Too many Americans are caught between poverty and the middle class. A \$15 minimum wage is just that, the minimum. We can do so much better. The fight can't stop at \$15, it must go further. We need to start talking about how to get wages up to \$30, \$40, and \$50 an hour. No American should have to worry about how to put food on the table or keep a roof over their head. To succeed and survive as a nation, we need a strong and healthy middle class.

INVEST IN TECHNOLOGICAL ADVANCEMENT

The United States cannot abandon the technological progress that fueled our economic recovery from the 2008 financial crisis. We must double down on American ingenuity to stimulate economic growth. A 2016 report from the Obama Administration echoes this sentiment:

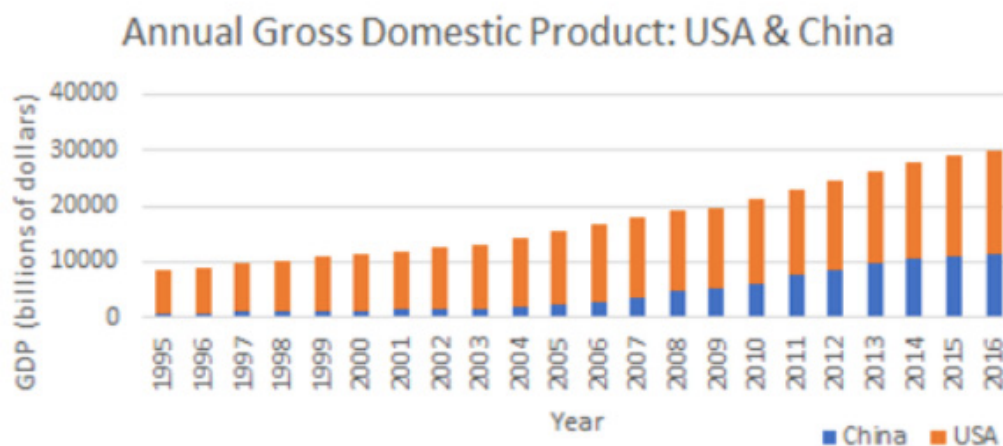
"Technical innovation has been expanding the American economy since the country's founding. American ingenuity has always been one of the nation's greatest resources, a key driver of economic growth, and a source of strategic advantage for the United States. Remarkable homegrown innovations have improved quality of life, created jobs, broadened understanding of the world, and helped Americans approach their full potential. At the same time, they have forced Americans to adapt to changes in the workplace and the job market."⁵²

⁵¹ Bureau of Labor Statistics, Current Population Survey, <https://www.bls.gov/cps/documentation.htm#cmp>

⁵² United States, Executive Office of the President. (2016). Artificial intelligence, Automation, and the Economy.



At the same time, the United States must avoid falling behind China as China continues to make strategic investments in the advanced manufacturing, aviation and aerospace, and clean energy industries.⁵³ China has a plan for the next 100 years. China has 1.4 billion people while we only have 300 million. We cannot afford to be on the sidelines. With its “Made in China 2025” plan, China is well-positioned to prolong the economic growth that saw its share of the global economy grow from 4 percent in 2000 to 15 percent today.⁵⁴ In the same period, our share decreased from 31 percent to 24 percent.⁵⁵ The United States cannot afford to shy away from technological advancement. It is in our national interest to make even greater targeted investments in research and development to advance its progress.



⁵³ Is it time Beijing ditched its ‘Made in China 2025’ strategy? (2018, June 25). Retrieved from <http://www.scmp.com/news/china/economy/article/2149223/it-time-beijing-ditched-made-china-2025-and-stopped-upsetting>

⁵⁴ Bosworth, B. (2010). China in the World Economy (Rep.). doi:https://www.brookings.edu/wp-content/uploads/2012/04/0318_china_outlook_bosworth.pdf. See also Patton, M. (2016, March 01). U.S. Role In Global Economy Declines Nearly 50%. Retrieved from <https://www.forbes.com/sites/mikepatton/2016/02/29/u-s-role-in-global-economy-declines-nearly-50/#564300895e9e>

⁵⁵ Patton, M. (2016, March 01). U.S. Role In Global Economy Declines Nearly 50%. Retrieved from <https://www.forbes.com/sites/mikepatton/2016/02/29/u-s-role-in-global-economy-declines-nearly-50/#564300895e9e>

ADDRESS TRADE IMBALANCES

ENFORCE FAIR TRADE

Continual investment in the technology sector is crucial, especially as China continues to prioritize becoming the dominant global economic and national security superpower. However, investment in new technologies is only one part of the grand strategy we must adopt to compete effectively with China on the global stage.

The United States must also address unfair Chinese trade practices and our trade imbalance, which creates economic and national security risks. For too long China has created an unfair trade advantage through currency manipulation, which keeps the U.S. dollar high. Further, they are dumping steel and other materials in the U.S. at below-market prices, driving U.S. industries out of business. Congress has an important role to play in this area by holding China accountable through legislative action.



Fair Trade with China Enforcement Act

I introduced the **Fair Trade with China Enforcement Act** which would help correct our country's trade imbalances with China and give American workers and industries a level playing field to compete and succeed. Our imbalanced trade relationship with China poses profound national and economic security risks to the United States. This legislation would further strengthen the American position by safeguarding assets from Chinese influence and possession, and blunting China's tools of economic aggression. It would also crack down on abusive trade practices by safeguarding American assets from Chinese influence and possession.

DECENTRALIZE HUBS OF TECHNOLOGY AND CAPITAL INVESTMENT

The geographical consolidation of technology supercenters is impeding the growth of the U.S. economy and the equitable distribution of wealth throughout the nation. Exorbitant rents, traffic congestion, and prohibitively high costs of living are driving talented young professionals out of Silicon Valley and innovation hubs like it. In fact, the city of San Jose publicly opposed an economic development project because it would create too many jobs and aggravate an existing housing crisis. The Palo Alto City Council similarly voted to limit the development of office space in certain parts of its city to no more than 50,000 square feet per year.

By contrast, the Midwest region has few fast-growing supercities and has done relatively poorly in response to global competition. In the years preceding the Great Recession (2000-2007), the Midwest saw the greatest decline in the prime-age employment rate across census regions: 2.6 percentage points compared to 1.7 (South), 0.9 (West), and 0.7 (Northeast).⁵⁶

Worker Act

The **WORKER Act**, would establish the Distressed Community Investment Agency within the U.S. Department of Commerce. This agency would have the mission of promoting, establishing, and strengthening venture capital investment in distressed communities through grants, contracts, and other agreements with public and private entities.

There are many communities throughout the United States eager and able to support the expansion of the tech industry and high-growth sectors. Cities like Akron and Youngstown in Ohio, or Detroit and Flint in Michigan offer affordable housing prices, low costs of living, and ample opportunities for economic development. Still, 80 percent of all venture capital investment goes to three states: California, New York, and Massachusetts. Only 4 percent goes to the Midwest. We must work together to decentralize hubs of technology and capital investment to spread economic growth and the innovation economy to all regions of the country.

⁵⁶ Center for American Progress. (2018, May 14). Blueprint for the 21st Century. Retrieved from <https://www.americanprogress.org/issues/economy/reports/2018/05/14/450856/blueprint-21st-century>/https://cdn.americanprogress.org/content/uploads/2018/05/14112409/JobsBlueprint-report.final_.pdf

California, Massachusetts, New York



Venture Capital Investment: 80%

The Midwest



Venture Capital Investment: 4%



Youngstown Business Incubator

The Youngstown Business Incubator (YBI) in Northeast Ohio is a prime example of how tech companies can prosper and expand in cities across the Midwest. YBI was founded in 1995 and has been rated one of the top university-associated incubators in all of North America. It currently has 32 portfolio companies, including Youngstown-based Turning Technologies and its over 250 employees.



Entrepreneurship Partnership eBay and the City of Akron

"Retail Revival" is an eBay entrepreneurship program that partners with small businesses to help them harness the power of technology and eBay's global marketplace. Ohio's 13th Congressional District is the first in the nation to be chosen for this pilot program. In 2018, more than 100 Akron and Warren, Ohio businesses were selected to participate in the year-long program. These businesses are receiving exclusive support and resources to help them begin selling their products on the eBay platform, including a comprehensive training, a dedicated customer service support team to answer any questions the new sellers may have, a complimentary eBay store subscription, and an eBay selling starter kit.



Social Services for Working Families

Since 2000, the number of women in the U.S. workforce has declined due to “insufficient support, such as child care, paid family leave, and long-term supports and services, [that] present significant obstacles to economic security and opportunity for both working-class families and women in particular.”⁵⁷ A 2016 Institute for Women's Policy Research survey of job training administrators found that financial considerations, followed by a lack of child care, were the most commonly cited reasons women did not complete job training.⁵⁸ Our workforce cannot be strong and productive without women's full participation. To keep women in the workforce, we need to bolster support services that help working women and families.

The United States must follow the lead of other countries by granting progressive family benefits to workers. No parent should have to choose between keeping a job and caring for his or her children. Currently, only 15 percent of the workforce has paid family leave through their employers.⁵⁹ Passing comprehensive legislation like the **FAMILY Act** would provide qualifying workers with up to 12 weeks of annual paid leave for the adoption or birth of a child, the serious illness of an immediate family member, or their own medical condition. Each year, inadequate or nonexistent paid family and medical leave policies cost working families an estimated \$20.6 billion in lost wages.⁶⁰ Congress must do more to protect these families from falling into poverty.

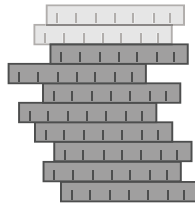
⁵⁷ Center for American Progress. (2018, May). Blueprint for the 21st Century. Retrieved from <https://www.americanprogress.org/issues/economy/reports/2018/05/14/450856/blueprint-21st-century/>

⁵⁸ Hess, C., Williams-Baron, E., Gault, B., Hegewisch, A., & Phil, M. (2016, December 13). Supportive Services in Workforce Development Programs: Administrator Perspectives on Availability and Unmet Needs. Retrieved from <https://iwpr.org/publications/supportive-services-in-workforce-development-programs-administrator-perspectives-on-availability-and-unmet-needs/>

⁵⁹ U.S. Bureau of Labor Statistics. (2017, September). National Compensation Survey: Employee Benefits in the United States, March 2017 (Tables 16 and 32). Retrieved 22 September 2017, from <https://www.bls.gov/ncs/ebs/benefits/2017/ebbl0061.pdf>

⁶⁰ Glynn, S. J., & Corley, D. (2016, September). The Cost of Work-Family Policy Inaction: Quantifying the Costs Families Currently Face as a Result of Lacking U.S. Work-Family Policies. Center for American Progress Publication. Retrieved 22 September 2017, from <https://www.americanprogress.org/issues/women/reports/2016/09/22/143877/the-costof-inaction>

According to the National Women's Law Center, American women working full time are paid on average just 80 cents for every dollar paid to men. "The wage gap is even more substantial for some groups of women, with Black women typically making only 63 cents, Latina women only 54 cents, and Native American women only 57 cents for every dollar paid to white, non-Hispanic men.



Women earn 80 cents for every dollar paid to men

Asian women working full time, year round are typically paid only 87 cents for every dollar paid to their white, non-Hispanic male counterparts.”⁶¹ We need to close the gender and race wage gaps. Legislation like the **Paycheck Fairness Act** would help strengthen and close loopholes in the **Equal Pay Act**, while providing effective remedies to women being denied equal pay for equal work.

CONCLUSION

For many Americans, the realities of everyday life—paying the bills, caring for a family, putting food on the table, and keeping a roof over their head—are a constant struggle. The future of our economy rests in our ability to alleviate this struggle by innovating and creating new, livable-wage jobs where they are needed most. This will involve a robust jobs and infrastructure package, strategic investments in our manufacturing sector, trade policies that give American workers and producers a level global playing field on which to compete, and federal efforts to decentralize hubs of technology and capital investment and spread economic growth and the innovation economy to all regions of the country.

Any serious discussion of how we improve the economic well-being of the United States must include a discussion of how we improve the lives of ordinary Americans. We must recognize the importance of labor unions in growing the middle class, and continue to advocate for strong labor unions, robust collective bargaining, and secure pensions and benefits. We must raise the minimum wage so every American earns a living wage and can retire with peace of mind. And we must ensure high-quality, affordable healthcare for all, paid family leave, and better services to support the hardworking women and men who make our economy run.

Together, we can put America back to work.

⁶¹ National Women's Law Center. (2017, September). Workplace Justice FAQs About The Wage Gap. Retrieved from <https://nwlc-ciww49tixgw5lbab.stackpathdns.com/wp-content/uploads/2017/09/FAQ-About-the-Wage-Gap-2017.pdf>